

## Trump administration climate report says damages "intensifying across the country"

Required Annotations		Student-Created Annotations		Summary / Questions / Reflection	
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The federal government on Friday, November 23, released a long-awaited report with an unmistakable message: The effects of climate change, including deadly wildfires, increasingly **debilitating** hurricanes and heat waves, are already battering the United States, and the danger of more such catastrophes is worsening.

The report's authors, who represent numerous federal agencies, say they are more certain than ever that climate change poses a severe threat to Americans' health and pocketbooks, as well as to the country's infrastructure and natural resources. And while it avoids policy recommendations, the report's sense of urgency and alarm stand in **stark** contrast to the lack of any apparent plan from President Donald Trump to tackle the problems, which, according to the government he runs, are increasingly dire.

The congressionally mandated document — the first of its kind issued during the Trump administration — details how climate-fueled disasters and other types of worrisome changes are becoming more commonplace throughout the country and how much worse they could become in the absence of efforts to combat global warming.

Already, western mountain ranges are retaining much less snow throughout the year, threatening water supplies below them. Coral reefs in the Caribbean, Hawaii, Florida and the United States' Pacific territories are experiencing severe bleaching events. Wildfires are devouring ever-larger areas during longer fire seasons. And the country's sole Arctic state, Alaska, is seeing a staggering rate of warming that has **upended** its ecosystems, from once ice-clogged coastlines to increasingly thawing permafrost tundras. [...]

The authors argue that global warming "is transforming where and how we live and presents growing challenges to human health and quality of life, the economy, and the natural systems that support us." And they conclude that humans must act aggressively to adapt to current impacts and **mitigate** future catastrophes "to avoid substantial damages to the U.S. economy, environment, and human health and well-being over the coming decades." [...]

That urgency is at odds with the stance of the Trump administration, which has rolled back several Obama-era environmental regulations and incentivized the production of fossil fuels. Trump also has said he plans to withdraw the nation from the Paris climate accord and questioned the science of climate change just last month, saying on CBS's "60 Minutes" that "I don't know that it's man-made" and that the warming trend "could very well go back."

Furthermore, as the Northeast faced a cold spell this week, Trump tweeted, "Whatever happened to Global Warming?" This shows a misunderstanding that climate scientists have repeatedly tried to correct — a confusion between daily weather **fluctuations** and long-term climate trends. [...]

That report is striking in its clear statement that climate change is not only already affecting the U.S., but that the effects are getting worse. [...]

The report finds that the continental United States already is 1.8 degrees Fahrenheit warmer than it was 100 years ago, surrounded by seas that are on average nine inches higher and being racked by far worse heat waves than the nation experienced only 50 years ago.

But those figures offer only the **prelude** to even more potentially severe

impacts. The report suggests that by 2050, the country could see as much as 2.3 additional degrees of warming in the continental United States. [...]

Key crops, including corn, wheat and soybeans, would see declining **yields** as temperatures rise during the growing season. The city of Phoenix, which experienced about 80 days per year over 100 degrees around the turn of the century, could see between 120 and 150 such days per year by the end of the century, depending on the pace of emissions.

And those who face the most suffering? Society's most vulnerable, including "lower-income and other marginalized communities," researchers found.

In another major step, the authors of the new report have begun to put dollar signs next to projected climate damage, specifically within the United States.

In a worst-case climate-change scenario, the document finds, labor-related losses by the year 2090 as a result of extreme heat — the sort that makes it difficult to work outdoors or seriously lowers productivity — could amount to an estimated \$155 billion annually. Deaths from temperature extremes could take an economic toll of \$141 billion per year in the same year, while coastal property damage could total \$118 billion yearly, researchers found.

Of course, mitigating climate change would also mitigate this damage, by as much as 58 percent in the case of high-temperature related deaths, the report finds.

The **categorical** tone of the new assessments reflects scientists' growing confidence in the ability to detect the role of a changing climate in individual extreme events, such as heat waves and droughts. At the same time, increasingly sophisticated computer simulations now allow them to project future changes in highly specific regions of the country. [...]

The report is being released at the same time as another major federal climate study that, in contrast, reaches a more positive conclusion — at least with respect to what can be done about climate change.

The Second State of the Carbon Cycle Report, which examines all of North America (not just the United States), finds that over a decade, greenhouse-gas emissions from fossil fuels declined by 1 percent per year. The result is that while North America emitted 24 percent of the world's emissions in 2004, that was down to 17 percent in 2013. This occurred in part thanks to improvements in vehicle fuel efficiency, the growth of renewable energy and the swapping of coal-burning for natural gas. [...]

The release of the National Climate Assessment comes on the heels of other recent global warnings, most notably a report by the United Nations' Intergovernmental Panel on Climate Change finding that the world would have to make **unprecedented** changes in the next decade to remain below 2.7 degrees Fahrenheit (1.5 degrees Celsius) of total warming above preindustrial levels.

The last time a U.S. National Climate Assessment was published, in 2014, Obama administration officials took the document seriously, with top policymakers heralding its release and embracing its findings. [...]

## Questions

1. Which statement accurately represents the relationship between two of the article's CENTRAL ideas?
  - a) The federal government recently issued a report on the effects of climate change; some effects, such as deadly wildfires and debilitating hurricanes, are already affecting people in the U.S., and those affected are angry at President Trump for his inaction.
  - b) The federal government recently issued a report on the effects of climate change; however, it failed to offer any policy recommendations on how to tackle the problems, so it unfortunately cannot be much use to policymakers.
  - c) As described in a recent federal report, climate change effects in the U.S. are worsening; the Trump administration continues to refute the science of climate change, but researchers and policymakers say it is past time to act.
  - d) As described in a recent federal report, climate change effects in the U.S. are worsening; in response, Trump claims that raking forests will prevent some of the effects, like catastrophic wildfires, but researchers say his ideas are laughable.
2. Which statement would be MOST important to include in an objective and accurate summary of the article?
  - a) The congressionally mandated report by the federal government on climate change impacts is the first of its kind ever issued by a president.
  - b) The worst effects of climate change have occurred in Alaska, where more snow has fallen along the coastlines, preventing the yearly thawing of permafrost tundras.
  - c) The federal report on climate change impacts is full of dire and unsupported predictions on how people will be affected if they fail to combat global warming.
  - d) The report on climate change impacts makes the argument that global warming is transforming both where and how we live and also poses challenges to human health.
3. The author sometimes uses a subjective tone in the article. In which of these sentences from the article does the author MOST CLEARLY use a more objective tone to clarify a point?
  - a) Produced by 13 federal departments and agencies and overseen by the U.S. Global Change Research Program, the report stretches well over 1,000 pages and draws more definitive, and in some cases more startling, conclusions than earlier versions.
  - b) This shows a misunderstanding that climate scientists have repeatedly tried to correct — a confusion between daily weather fluctuations and long-term climate trends.
  - c) "We need to use this best available data so we can start making decisions to start investing in our future. ... It shouldn't be that complicated or that partisan."
  - d) On the other side of the country from Washington, at least one well-known atmospheric scientist this week was wrestling not with the contents of a climate report but with the changing view from his window.
4. Read the paragraph from the article.

"Normally, I can see San Francisco Bay from my home," said Ken Caldeira, a senior researcher at the Carnegie Institution for Science. "Today and for the past few days, I could not see the bay for all the smoke from the Paradise Fire. Fires that approach the size of the Paradise Fire are most common in the hot dry years — the kind of years that we are likely to see many more of."

How does this paragraph contribute to the ethos of the article?

- a) by quoting a senior scientist about one of the climate change effects described in the report
- b) by referring to a specific time and place that experienced an effect of climate change
- c) by showing that the expert quoted felt distressed and scared during the recent climate change-related fire
- d) by recounting the number of days that a specific environment was affected by a climate change effect